Format Choice
of
Food and Grocery Retailer

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Format Choice of Food and Grocery Retailers[1]

Experience of retail in most countries have shown that organized retail takes some time to take-off, but having reached a critical mass, the share increases exponentially. The Indian Ministry for commerce identifies the importance of employment generating sectors. Organized Retail is one such high growth area. Its impact on consumers, allied industries and manufacturers is far reaching. Organized retail, which currently stands at two per cent of the total estimated market of 180 billion USD, is growing rapidly (The Marketing Whitebook, 2003-04).

A retail format is a store 'package' that the retailer presents to the shopper. A format is defined as a type of retail mix, used by a set of retailers (Levy and Weitz, 2002). Store Formats are formats based on the physical store where the vendor interacts with the customer (Enders and Jelassi, 2000). It is the mix of variables that retailers use to develop their business strategies and constitute the mix as assortment, price, and transactional convenience and experience (Messinger and Narsimhan, 1997).

The choice of retail mix elements will enable it to decide the type of format or structure of business. Each retailer needs to evaluate the enablers and deterrents in the retail marketplace. This primarily involves identifying the key drivers of growth, the shoppers' profile and shopper expectations. It also means evaluating the nature of competition and challenges in the market place. Then the retailer decides the elements of the retail mix to satisfy the target markets' needs more effectively than its competitors.

Factors affecting Store Choice

Store choice is recognized as a cognitive process and is as much an information processing behaviour as any other purchase decision (Sinha & Banerjee, 2004). Many researchers on format choice behaviour amongst shoppers have acknowledged the fact that format choice decision is dynamic in nature and is tied to particular time and place (Leszczyc and Sinha, 2000; Keen et al, 2004). Also consumer perceptions change over time as a result of added information, increased competition and changing expectations (Zeithaml, 1988).

A broad conclusion about store choice behaviour among consumers indicates that image and perceptions have significant impact on the final outcome. Perceptions about stores are driven by tangible characteristics like store format, distance of store from home as well as intangible characteristics like environment of the store. In their study on store choice behaviour in an evolving market, Sinha and Banerjee (2004) found that overall proximity and merchandise were the primary reasons, followed by ambience and kind of service offered by the store. In the same study it was also observed that generally shoppers have just one, at most two, good reasons for patronizing a store. This reason would be the overriding criterion that would cause a shopper to choose a store.

In India and rest of Asia organized retail is expected to grow rapidly in future. One factor in favour of this growth is the increased consumer valuation of time (Messinger and Narsimhan, 1997). Thus as shoppers become more and more hard pressed for time, their preferences would shift towards one-stop shopping experiences. It is also suggested that improvements in consumer transport would encourage the growth of one-stop shopping. This lends credibility to the popular belief that hypermarkets would flourish in future. In a study of store choice behaviour amongst audio equipment shoppers, Dash et al (1976) suggested that specialty store shoppers were more

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certain than the department store shoppers about their product choice being satisfactory. What implications could this have for food and grocery category? A housewife purchases fruits and vegetables from a roadside vendor, whom she has been patronising since long, rather than from a supermarket. Taking a cue from this, it could be assumed that the perceived risk of purchase going wrong is less at the vegetable vendor as compared to a supermarket, where there is no guarantee of the fruits and vegetables being fresh. Here a store is being chosen based on self-confidence that the customer has regarding the store. Another important aspect with regard to format choice by shoppers was highlighted by Sharma and Krishnan (2002). In their study they found that sales people do not seem to enhance preference for stores. Thus a simple not so literate grocer at a Kirana store might prove to be more effective than qualified and well trained salespeople at big hypermarkets. This is one of the reasons why Kirana stores are still so popular in India. Small stores seem to be able to create a special relationship between the salespeople and their customers. The result above brings us to another important question of the significance of the Internet in retailing (popularly known as e-tailing). Most experts agree that current retailing trends show a shift from traditional store based retailing to an increased use of the Internet. Store based retailers have great concern that the Internet will make the store obsolete. However, a study of the structure of the consumer decision-making process by Keen et al (2004) showed that physical retail stores have a large advantage over both catalogues and Internet. The study highlighted the importance of physical retail stores. Similarly, Sharma and Krishnan (2002) had indicated that while consumers could observe the merchandise in the physical store location, they had no such opportunity on the Internet. Hence unbranded products might not fare well on the Internet. Internet companies thus need to be more creative, especially when selling a product that requires touch and trial. They also need to focus their energies on fulfilment techniques critical to meeting customer expectations. Retail stores on the other hand can leverage their well-known name provided they can integrate their Internet operations with their current physical locations.

Zeithaml (1988) found that consumers consider both monetary and non-monetary costs – such as time and effort – to evaluate value of shopping at a particular store. Hence anything that can be built to reduce time, effort and search costs can increase perceptions of value. Search costs for a shopper can be reduced by properly laying out and displaying the merchandise. Use of appropriate signage can also reduce search effort. This is where store ambience plays an important role. The shopping experience as created by a clean, hygienic, well lit and neatly laid out store has been found to increase store patronage. Another important factor affecting store choice is the size of the store. There might be a size of shopping centre beyond which consumers do not perceive functional or convenience benefits anymore (Treblanche, 1999). Many customers do not prefer this format due to stress of walking and crowding. Thus these centres attract many shoppers who pursue recreation as the major benefit. Amongst parameters that define a store format Engel, Blackwell and Miniard (2001) observed that price level, assortment and location of store appear as important drivers for consumer's choice between store formats. Quality and service on the other hand did not differentiate between formats in their study.

Utility as the Basis of Format Choice

A different approach of assessing shoppers' format choice decision process is based on utility that shoppers derive from shopping at a particular store. Consumer's choice of preferred store format is based on the perceived utility that s/he derives from the store format (Solgaard and Hansen, 2003). In principle utility emerges based partly on what the consumers perceive they receive and partly on what consumers perceive they give. To receive the store service the consumer will incur some costs, i.e., spend a certain amount of resources – time, effort and money. Since these resources are scarce, the consumers would try to direct their resources towards the stores that will maximize their utility.

The basic tenet of the theory is that a consumer's notion of value depends not only on the value of goods and services available relative to the respective prices, but also on the perception of the quality of the financial deal. This theory was developed based on the Prospect Theory as explained by Khanmen and Tversky (1979). Later the concept of Transaction Utility was modelled depending on the difference between the selling price and reference price. To explain this reference price was postulated and describes as the amount of money that a customer expects to pay for a good or service. It is suggested that any purchase occasion is associated with two utilities: acquisition utility and transaction utility. Acquisition utility represents the economic gain or loss from the transaction. Where as transaction utility is associated with purchase or (sale) and represents the pleasure (or displeasure) of the financial deal per se and is function of the difference between the selling price (p) and the reference price (q). The situation where $p > q$, the transaction utility is negative (rip-off situation); conversely when $p < q$, the transaction utility is positive (bargain situation). The total utility of a purchase is a sum of acquisition utility and transaction utility (Thaler, 1983). The implication is that an individual may not buy a product if acquisition utility is offset by loss in transaction utility when the price is sufficiently larger than reference price.

However, even though this theory exemplifies a purchase situation, it has not been applied in a retailing perspective. Given the basic tenet, it is felt that acquisition utility and transaction utility can be used to explain the shoppers' choice of a format. The theory may require modifications. Acquisition utility can be extended to include not only the price of the merchandise but also other costs associated with shopping such as, cost of product search, cost of information, size of purchase, and cost of access to the store. Shopping, being essentially a process that occurs in a context of a store may have a close association with the transaction utility. The perceived value delivered through the transaction could include all non-monetary aspects of the 'deal' that may include ambience and service at the retail point for explaining the transactional utility of the format. The theory also suggests that the two utilities are not mutually exclusive. It is imperative that any format decision would have to take a holistic view and incorporate both sets of utilities.

Need for the Study

According to Business World Marketing Whitebook 2003-04, 14% of sales in Modern retail stores, in India are in the food and grocery segment. In India, there are currently different product category-centric local avenues for shopping of goods in the food and grocery segment. Fresh Farm and Animal products' shopping is very different from the rest of the food and grocery shopping – unlike in more developed markets where the shopping destination for these two product segments is predominantly the supermarket. With many food oriented retailers lining up to grab their share of the Indian wallet, the long-term viability of these ventures depends on the appropriate format of the retail store. Looking at the food and grocery segment, there are six major strategic formats are used by food oriented retailers: convenience store, conventional supermarket, food based superstore, combination store, box (limited line store) and warehouse store. Elements of the store format that influence consumer choices in this category pose a challenge to Indian modern retailers today.

Previous studies in store selection have been done in markets where store formats have stabilized. However, in Indian scenario formats have been found to be influencing the choice of store as well as orientation of the shoppers (Sinha and Uniyal, 2005). Also, retailers are experimenting with alternate formats with differing success rates.

Many retailers are looking to set up food and grocery stores in India. It is one of the largest portions of the total retail sales in the country. However, there is a lack of study, in the Indian context, which suggests which parameters shoppers consider important when they decide which store format they want to shop in – which parameters they derive maximum utility from. Also, though choice of a format has been studied from several dimensions including the cost and effort as well as the non-monetary values, studies that present the complete picture and combine the aspects of the tangible as well as intangible values derived out of the shopping process are limited.

Research Methodology

The study was conducted in two phases. In the first phase an exploratory study was carried out to determine attributes that were considered important to any food and grocery format. An observation of the store formats indicated that there existed five different formats in this sector. Store managers of these five food and grocery stores in Ahmedabad were interviewed. The exploratory interviews helped us identify seven attributes which they thought were important to their formats and affected customer choice.

The second phase was a field study with an objective to find utilities that shoppers attached to seven attributes identified in the exploratory study. A simple conjoint analysis model was used for this study. The exploratory study helped identify the attributes and their levels to be used in constructing the stimuli **(Appendix 1)**. These attributes were salient in influencing shopper preference and choice for the stores. Also the attribute levels were such that, they were thought actionable by the management of these store formats. The number of levels for each attribute was restricted to three so as to minimise the respondent evaluation task and yet estimate the parameters with reasonable accuracy.

A full-profile procedure was used in this study. Studies have indicated that full-profile approach is more popular than paired-comparison in practice since in the latter case there is a potential loss of realism (Churchill, 2002). The profiles of the store formats were created by using the seven parameters with three levels each. Eighteen profiles that built the orthogonal array were used **(Appendix 2)**. Cards for each profile were created and shown to the respondents during the interview (**Appendix 3)**. The respondents were asked to go through each card before responding. Respondents were asked to rate the format profiles on a 7-point Likert-type scale. They were asked to indicate their intention to purchase from such store formats. There is an increasing use of this measure (Churchill, 2002).

A demographically homogenous sample was selected for the interview responses. The respondents belonged to in SEC A class[2]. They were selected as this segment has been found to use multiple formats[3]. With the assumption that purchases in this category are determined by women in the household, married women in the age group of 30-50 years were chosen. Fifteen of the respondents were stay-at-home mothers. The monthly household income of the respondent was in the range of Rs. 10,000 to Rs. 60,000. Their average monthly expenditure on food and groceries varies between Rs. 2,500 to Rs. 8,000. Twenty-six respondents were residing in IIMA campus and four respondents lived off-campus. Interviews were scheduled after taking appointments from prospective respondents.

Aggregate level analysis was conducted using all the respondents. Utility levels for each respondent was calculated and averaged to get aggregate level utility values. The model used is depicted as follows:

$$\mathbf{U = b0 + b1*x1 + b1*x2 + b1*x3 \ldots\ldots\ldots\ldots + b7*x19 + b7*x20 + b7*x21}$$

Where, x1, x2, x3 = levels representing Type of Merchandise
x4, x5, x6 = levels representing Number of SKUs
x7, x8, x9 = levels representing Number of Brands
x10, x11, x12 = levels representing Price
x13, x14, x15 = levels representing Accessibility
x16, x17, x18 = levels representing Service
x19, x20, x21 = levels representing Ambience

Data analysis was carried out with the help of SPSS.

[2] A Socio-Economic Classification developed to explain consumption. It is based on income and occupation. SEC A, on a gross level, represents the upper income category of customers.
[3] Based on personal observation of the authors who live in the same locality.

Findings of Exploratory Research

The exploratory study brought out five different formats that existed in the food and grocery sector. These were all store-based formats. Although non-store format are being operated in India, they are very limited and are not present in Ahmedabad. The different 'retail mix' and the ingredients that differentiated each of them have also been described for each of the formats.

Kirana Store

Kirana store, a combination of convenience and mom-and-pop stores, is a well-located store. Ease of shopping, personalised services, credit availability and home delivery of ordered merchandise are the major reasons for its patronage, even when it charges average to above average prices, and carries a less number of items. It stays open for long hours. These are generally over-the-counter (OTC) stores and have a dull atmosphere. They would carry about 5000 items. They are small stores generally less than 500 sq ft. Yet, they service almost the complete purchase basket of customers. They are also useful for fill-in merchandise and emergency purchases. Many customers shop at least two to three times a week at these stores. These stores face most competition from supermarkets that have started providing longer hours and better stocks of non-food items.

Upgraded Kirana Stores

Some stores have upgraded themselves to offer both OTC and self-service. This is a unique format that provides a cleaner and more hygienic environment for shopping as compared to a small Kirana store. The merchandise and other elements of retail mix remain as in case of Kirana.

Supermarkets

A conventional supermarket is a self-service food store offering groceries with limited sales of non-food items, such as health and beauty aids and general merchandise at discounted prices. They are larger in size and carry 9,000 to 11,000 items. They occupy between 1000 and 4000 sq. ft space. The self-service nature allows supermarkets to cut costs, as well as increase volume. They are chosen due to volume sales, self-service, low prices and cleaner and brighter ambience for shopping. Supermarkets offer medium variety of brands and SKUs. Conventional supermarkets have to deal with intense competition from other types of food stores. Convenience stores offer greater customer convenience; Hypermarkets have more product lines and greater variety, low prices, as well as better gross margins; Wholesale dealers offer wholesale prices and have low operating costs.

Hypermarkets

Hypermarkets are large (above 8000 sq. ft.) combination food and general merchandise retailer. They stock a large assortment (40,000 to 60,000 items) and hence offer more variety of merchandise, brands and SKUs. Merchandise includes groceries, hardware, furniture, home appliances, clothes, sports equipment, and crockery. Hypermarkets offer a clean, hygienic and bright environment for shopping. They offer variety of promotional schemes to shoppers. Some hypermarkets are known to offer lowest price in the market on their merchandise. This attracts consumers to such hypermarkets. Economies of scale, efficient management of demand and supply chain are main reasons why hypermarkets can offer lower prices in the market.

Wholesalers

Wholesalers, although not retailers in strictly sense, attract retail customers for grocery and food items in India. They offer only one or two types of merchandise (grains and pulses), low variety and only one or two pack sizes (in which merchandise can be purchased). Purchase from wholesalers thus takes place in bulk. The main attraction of the wholesaler is its low price that may be lower than prices offered by hypermarkets. They are patronised especially when buying grains, cereals, pulses and edible oil, as there is tendency among the shoppers in Ahmedabad to buy their annual requirements of these products when the fresh crop arrives.

Definition of a Retail Format – How is value delivered to shoppers?

The exploratory study brought out that food and grocery formats can be distinguished based on these parameters. These findings are tabulated in the **Table – 1**. As can be seen, the combinations of the seven parameters have given rise to some generic retail formats. We can thus define a retail format in terms of these seven parameters.

1. Categories of Merchandise
Category of merchandise refers to different types of goods held in the store. There are stores that hold only grains and pulses, stores that hold other grocery items along with grains and pulses and stores that hold consumer durables, clothes along with food and groceries.
2. Variety of Brands held in the store for each Type of Merchandise
Food and grocery stores can also be differentiated based on variety of brands held in the store for each type of merchandise e.g. a Kirana store would hold 5-6 brands of toilet soap, however, a hypermarket would hold more than 10 brands of toilet soap.

3. Number of SKUs held in the store under each Brand
In small retail stores one may not find all SKUs under any given brand e.g. a Kirana store may hold only a 100 gm tube of toothpaste, however, hypermarket may hold all the SKUs available for a particular brand of toothpaste.

4. Price of Merchandise
Retail stores can be differentiated based on price at which merchandise is sold in the store. Thus we have stores that sell their merchandise at wholesale prices, maximum Retail Price (MRP), discounted prices or at lowest price in the market (may be EDLP).

5. Service Offered in the Store
Some food and grocery stores are over-the-counter (OTC) stores. Others are self-service stores (essentially supermarkets and hypermarkets). Some stores also offer home-delivery service to their customers. In some cases, stores offered home delivery when the bill value exceeds a certain amount.

Table 1: Value Proposition of Existing Food and Grocery Formats in India

Store Format	Retail Mix Elements						
	Merchandise	**Number of Brands**	**Number of SKUs**	**Price**	**Service**	**Accessibility**	**Ambience**
Kirana Store	Grains, Pulses, other Groceries, personal products	Medium (4-5 brands per product category)	Low	MRP	OTC + Home Delivery	High (walking distance)	Dull
Upgraded Kirana Store	Grains, Pulses, other Groceries, personal products	Medium (4-5 brands per product category)	Low	MRP	OTC + Home Delivery + Self-service	High (walking distance)	Medium
Supermarket	Grains, Pulses, other Groceries, personal products , some other household items (plastics, utensils, etc)	Medium (4-5 brands per product category)	Medium	Some Discount	Self – Service + Home Delivery based on bill value	Medium (need to travel 10-15 minutes)	Bright and clean
Hypermarket	Grains, Pulses, other Groceries, personal products, wet groceries Household appliances, clothes, Footwear etc	High (more than 6 brands per product category)	High	EDLP / low price + Discount	Self-Service + Home Delivery based on bill value	Low (need to travel more than 15 minutes)	Bright and clean
Wholesalers	Grains and Pulses	Low (1-3 brands per product category)	Low	Wholesale	OTC + Home Delivery	Low (need to travel more than 15 minutes)	Dull

6. Accessibility
Accessibility is the ease with which one can reach a particular food and grocery store. It can be defined either in terms of distance or time required to reach a particular store. Customers prefer to use the latter.

7. Ambience
Ambience refers to the shopping conditions that exist within a store. It is a composite parameter composed factors like of cleanliness, lighting, walking space and arrangement of merchandise (display).

Findings of Conjoint Analysis

The result of the aggregate conjoint analysis gave the relative importance of each parameter. The scores in the descending order of importance are as shown in **Table 2**. Ambience came out as the most important attribute. Nearness, choices available (not the brands) and price are other important attributes. This may be an indication that customers want store formats, dealing in grocery, to help them minimise their cost and efforts, while they shop in a good ambience. However, it may be noted that there is not much difference among all attributes. This signifies that customers want almost all of them. This would lead to an increase in the cost of operations. This also indicated that since the customers want a medium width and higher depth, size of store might not be a determinant. They may favour the supermarket or the Up-graded Kirana Stores.

Table 2: Importance Score of Each Attribute

Attribute	Importance Score	Attribute	Importance Score
Ambience	18.99	No. of SKUs	14.64
Accessibility	15.11	Type of Merchandise	12.80
Price	14.77	Service Mode	11.86
		No. of Brands	11.82

Within each of these parameters, the utility (part-worth) of the different levels in each parameter has been determined. **Table – 3** gives these utilities along with the variation from the lowest value. Assigning a score of 100 for the lowest level in each parameter, the gain in preference indicated for the other levels are shown. The graphical representation of the utilities is given in **Appendix – 4**.

Attribute Utilities

The highest importance was attached to Ambience. The largest part-worth utility in this attribute was given to spectacular, the lowest to dull. This is expected as stores are upgrading themselves and customers are experiencing better facilities. However, the incremental increase from the medium level to the best level is not as high as the difference between level 1 and level 2. When the retailer is trying to decide how opulent a surrounding is adequate, this incremental increase in the food and grocery segment would have to be weighed against the cost of creating the desired ambience.

Accessibility
Walking distance, either from home, workplace, child's school or other such frequented place was given higher priority. Second to this was level 2, or the 10-15 minute commute destination. This shows the importance of convenience in reaching the store. Out of the seven parameters, this is one that was the second most important, with the closest destination being preferred. Customers want the store to be located in their vicinity. They are more likely to patronise a store that is located within walking distance.

Price
This is the third most important parameter, with the preference more for higher discounts in the product offering. Referring to the transactional theory, this directly improves the value proposition for the customer. When they feel that they are getting the product for less than the declared price, the bargain makes the utility of the transaction higher.

Number of SKUs
The number of pack sizes available emerged as the next most important parameter. This is an indication of the choice that a consumer has. The preference of a range of pack sizes over the kind

of merchandise being stocked in the store shows that irrespective of the store format a customer visits, the variety in terms of pack sizes is expected. This indicates that the Indian consumer is choosy about the selection. The Utility of higher pack sizes on offer was as expected higher than the Utility derived from lower SKUs on offer. This expectation is where the organized retail player can cater to better if he is able to manage his operations smoothly. Economies of scale should make it possible for the organized retail player to viably stock all possible SKUs in a product category.

Type of Merchandise

The type of merchandise, or the kinds of product categories kept in a store determines the characteristic of the store format. A shop with only food and personal care products is typically Kirana store, whereas level 3 in type of merchandise is called a hypermarket. Within this parameter, the highest utility score was given to level 2, the second most preferred format was level 1, which is mainly a specialised wholesale format. The low importance attached to this parameter showed that customers were willing to patronize all store formats, when the higher importance parameters were satisfied.

Type of Service

The mode of product selection and acquisition received the second lowest importance. Customers, offered with a wider choice, will like to exercise this in their process of product selection and purchase. Thus, OTC service was the least preferred. But the convenience of home delivery outweighed the utility of choosing the products by one self.

Number of Brands

This was the least important parameter. This could be because customers would not like to switch from their preferred brands. The reason for switching might be factors like availability in the store and bargain on offer. Thus, the availability in a store determines the brand selection, rather than the other way round where a format will not be patronized if the wanted brand is not available. Within this parameter, the most preferred level was not the one that gave the most selection. The most preferred was level 2. This shows that too many choices in the product selection can put off the consumer. This could be seen as a waste of one's energy in the selection process. The most restrictive level was the least preferred of the three.

Table – 3: Importance of Attributes and their Part-Worth

Attributes	Description of Levels	Utility	Increase from Base
Merchandise (12.8)	Grains and Pulses are sold in the store	-0.1914	100.00%
	Grains, pulses, other food items, personal care products are sold in this store	0.216	143.21%
	Grains and Pulses, other food items, personal care products, vegetable, home appliances are sold in the store	-0.0247	121.61%
SKUs (14.64)	Only one pack size available	-0.1358	100.00%
	2 pack sizes available	-0.0864	122.22%
	More than two pack sizes available	0.2222	144.44%
Brands (11.82)	Less than 3 brands or variations available	-0.179	100.00%

Attributes	Description of Levels	Utility	Increase from Base
	4-5 brands or variations available	0.1358	131.48%
	Greater than 6 brands or variations available	0.0432	135.80%
Price (14.77)	Prices at Retail Market price	-0.1049	100.00%
	Some discount offered on most items	0.0247	112.96%
	Guarantee of lowest price charged on all items	0.0802	120.98%
Accessibility (15.11)	Walking distance	0.2284	145.68%
	Need to travel 10-15 min to reach the store	-0.0432	122.84%
	Need to travel more than 15 minutes to reach the store	-0.1852	100.00%
Service (11.86)	Over the Counter	-0.1481	100.00%
	Self-service	-0.0494	119.75%
	Home delivery	0.1975	139.50%
Ambience (18.99)	Dull	-0.3642	100.00%
	Medium	0.1111	147.53%
	Spectacular	0.2531	172.84%

Format Utilities

Overall utility for each of the 18 store profiles was calculated as follows:

$$\mathbf{U_F = \sum I_i \times U_{ij}}$$

Where

U_F = Overall Format Utility
I_i = Importance of i^{th} Attribute
U_{ij} = utility of j^{th} level of i^{th} Attribute

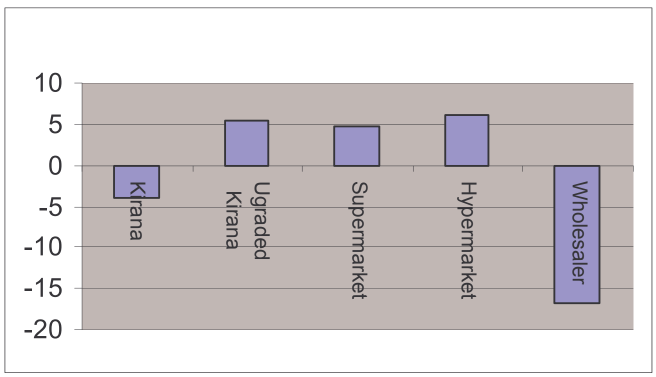
Using the above formula utility for each of 18 profiles was calculated as shown in the **Table – 4**. From the table it can be seen that profile 9 has the highest utility. The format is described as (i) Grains, pulses, other food items, personal care products are sold in this store (ii) More than two pack sizes available, (iii) Greater than 6 brands/unbranded variations available in a product category, (iv) Some discount offered on most items, (v) Need to travel more than 15 min to reach the store, (vi) Home delivery provided and (vii) Ambience in the store is Spectacular. This description is similar to a hypermarket. Customers are showing a tendency to travel a longer distance and shop at the store that offers a wider variety. Interestingly they do not want to carry the merchandise along and would prefer a store that offers home delivery. This may also be an indication that once the novelty of the ambience is lost, customers may patronise a store that have a wide variety and takes order on phone and delivers at home. There is also a tendency to go to a specialised store. It can be inferred that stores that sell grocery would have to make this as their destination category.

Table – 4: Utilities of Profiled Formats

Profile	Total Utility	Profile	Total Utility
1	-17.660	10	-4.547
2	4.136	11	-1.666
3	7.175	12	-0.135
4	-4.394	13	8.952
5	6.890	14	-0.889
6	2.318	15	-3.248
7	-0.909	16	6.627
8	-8.804	17	-7.258
9	11.244	18	2.161

A similar analysis was carried out for the five existing formats **(Figure – 1)**. The format with highest utility was hypermarket (6.054). Interestingly, its nearest competitor was the upgraded Kirana (5.355) and not the Supermarkets (4.683). The Kirana attained a utility score of (- 4.011) and the wholesalers (-16.840). It is likely that in the time to come, if wholesalers do not redefine themselves, they may lose the 'retail' sale and most likely hypermarkets may gain at their cost.

Figure – 1: Utilities of Existing Formats



Summary and Managerial Implications

Organised retail in food and grocery segment is at a fledgling state in the place of survey. Consumers are familiar with the supermarket and Kirana store format as they have been around for long. The hypermarket concept is new here and it will take sometime for these formats to overcome issues like crowded stores, time to process orders, product mix, and stock replenishment.

While deciding upon a format, managers can draw various profiles of their prospective store. Then using the Overall Store Utility (U_s) formula, utility for each prospective format can be calculated. The profile that gives that maximum utility could be chosen. The study also provides a hierarchy of and hence when the most preferred is not possible in a given market, the next best may be chosen. This study suggests that while deciding a store format it should be also kept in mind that customers prefer a specialist store and hence in case of a multi-category format like a hypermarket or a departmental store, each section would compete with a store that is a specialist. In addition, with regard to the attributes they may like to keep the following in mind:

- Types of merchandise -The store that offers them food products, groceries, and personal care products is the most preferred.

- Number of SKUs -The incremental increase from the medium level to the highest level is high and so there is merit in investing in this aspect in the store format decision
- Number of brands -Clearly the optimal level is 4-5 brands. The increase beyond this is negative.
- Price -The lower the better! But it is observed that the incremental change from offering some discount to a guarantee of cheapest prices in the retail market is less.
- Accessibility - This is another feature, which people would only prefer a closer location. Irrespective of where the store is located, customers would always like ceteris paribus, a place closer.
- Type of service - The clear preference was for home delivery.
- Ambience -The incremental increase in preference when moving from medium to the highest level is low. The optimal level therefore would be a medium level.

Limitations and Future Study

This study was conducted for one product and one customer segment. As type of product influence the purchasing patterns of customers, the importance of each of the attributes may need to be determined. Also a product like apparel is sold through almost sixteen formats that include the roadside vendors and the branded and designer store. It would be interesting to capture the utilities of each of the formats.

Shopping has been found to be influenced by the local culture. While most of the respondents in this study bought on a regular basis, it would make a good study to determine the format choice behaviour of many customers, like Gujaratis, who buy their grains, cereals, pulses and oil on an annual basis.

Efficiency in operations and how helpful are the salespeople at the store in helping you select your groceries. This is a feature that came up while conducting interviews. It is not store format specific but a characteristic of the specific store brand. But this is a deciding factor in choosing the store format. Trust in the store was another uncaptured element.

Appendix 1: Description of Levels for each Attribute

	1	2	3
Types of Merchandise	Grains and pulses are sold in this store	Grains, pulses, other food items, personal care products are sold in this store	Grains, pulses, other food items, personal care products, vegetables, home appliances available under one roof in this store
No. of Pack Sizes	Only one pack size available for eg, 500gm in Cooking Oil	2 pack sizes available for e.g. 500gm and 1kg in Cooking Oil	More than two pack sizes available for e.g. 500gm, 1kg, 2kg, 5kg packs of Cooking Oil
No. of brands available	Under three brands/unbranded variations available in a particular product category for example Lux, Lifebouy and Pears in Toilets soaps	4-5 brands/unbranded variations available in a particular product category for e.g. Lux, Lifebouy, Pears, Rexona & Medimix in toilet soaps	Greater than 6 brands/unbranded variations available in a product category e.g. Lux, Lifebouy, Pears, Rexona, Medimix, Santoor, Dove, Doy in toilet soaps
Pricing	Prices at the retail market price i.e. no discount offered	Some discount offered on most items	Guarantee of the lowest price charged on all items
Accessibility	Walking distance	Need to travel 10 -15 min to reach the store	Need to travel more than 15 min to reach the store
Customer Service	Over the counter service offered	Self Service and billed at a counter	Home delivery provided
Ambience	Dull	Medium	Spectacular

Ambience was depicted showing the following pictures,

Spectacular

Medium

Dull

Appendix 2: Orthogonal Array

	Attribute Levels						
Profile	**Types of Merchandise**	**No. of Pack Sizes**	**No. of brands available**	**Pricing**	**Accessibility**	**Customer Service**	**Ambience**
1	1	1	1	2	3	1	1
2	2	2	1	3	2	2	3
3	3	3	1	1	1	3	2
4	2	1	2	1	2	3	1
5	3	2	2	2	1	1	3
6	1	3	2	3	3	2	2
7	3	1	3	3	2	1	2
8	1	2	3	1	1	2	1
9	2	3	3	2	3	3	3
10	3	1	1	1	3	2	3
11	1	2	1	2	2	3	2
12	2	3	1	3	1	1	1
13	1	1	2	3	1	3	3
14	1	2	2	1	3	1	2
15	3	3	2	2	2	2	1
16	2	1	3	2	1	2	2
17	3	2	3	3	3	3	1
18	1	3	3	1	2	1	3

Appendix 3: Response Cards

CARD 1: Profile of the Store Format:

Grains and pulses are sold in this store

Only one pack size available for eg, 500gm in Cooking Oil

Under three brands/unbranded variations available in a particular product category for example Lux, Lifebouy and Pears in Toilets soaps

Some discount offered on most items

Need to travel more than 15 min to reach the store

Over the counter service offered

Ambience in the store looks like this -

CARD 2: Profile of the Store Format:

Grains, pulses, other food items, personal care products are sold in this store

2 pack sizes available for eg. 500gm and 1kg in Cooking Oil

Under three brands/unbranded variations available in a particular product category for example Lux, Lifebouy and Pears in Toilets soaps

Guarantee of the lowest price charged on all items

Need to travel 10 -15 min to reach the store

Self Service and billed at a counter

Ambience in the store looks like this -

CARD 3: Profile of the Store Format:

Grains, pulses, other food items, personal care products, vegetables, home appliances available under one roof in this store

More than two pack sizes available for eg. 500gm, 1kg, 2kg, 5kg packs of Cooking Oil

Under three brands/unbranded variations available in a particular product category for example Lux, Lifebouy and Pears in Toilets soaps

Prices at the retail market price i.e. no discount offered

Walking distance

Home delivery provided

Ambience in the store looks like this -

CARD 4: Profile of the Store Format:

Grains, pulses, other food items, personal care products are sold in this store

Only one pack size available for eg, 500gm in Cooking Oil

4-5 brands/unbranded variations available in a particular product category for eg. Lux, Lifebouy, Pears, Rexona & Medimix in toilet soaps

Prices at the retail market price i.e. no discount offered

Need to travel 10 -15 min to reach the store

Home delivery provided

Ambience in the store looks like this -

CARD 5: Profile of the Store Format

Grains, pulses, other food items, personal care products, vegetables, home appliances available under one roof in this store

2 pack sizes available for eg. 500gm and 1kg in Cooking Oil

4-5 brands/unbranded variations available in a particular product category for eg. Lux, Lifebouy, Pears, Rexona & Medimix in toilet soaps

Some discount offered on most items

Walking distance

Over the counter service offered

Ambience in the store looks like this -

CARD 6: Profile of the Store Format:

Grains and pulses are sold in this store

More than two pack sizes available for eg. 500gm, 1kg, 2kg, 5kg packs of Cooking Oil

4-5 brands/unbranded variations available in a particular product category for eg. Lux, Lifebouy, Pears, Rexona & Medimix in toilet soaps

Guarantee of the lowest price charged on all items

Need to travel more than 15 min to reach the store

Self Service and billed at a counter

Ambience in the store looks like this -

CARD 7: Profile of the Store Format:

Grains, pulses, other food items, personal care products, vegetables, home appliances available under one roof in this store

Only one pack size available for eg, 500gm in Cooking Oil

Greater than 6 brands/unbranded variations available in a product category eg. Lux, Lifebouy, Pears, Rexona, Medimix, Santoor, Dove, Doy in toilet soaps

Guarantee of the lowest price charged on all items

Need to travel 10 -15 min to reach the store

Over the counter service offered

Ambience in the store looks like this -

CARD 8: Profile of the Store Format:

Grains and pulses are sold in this store

2 pack sizes available for eg. 500gm and 1kg in Cooking Oil

Greater than 6 brands/unbranded variations available in a product category eg. Lux, Lifebouy, Pears, Rexona, Medimix, Santoor, Dove, Doy in toilet soaps

Prices at the retail market price i.e. no discount offered

Walking distance

Self Service and billed at a counter

Ambience in the store looks like this -

CARD 9: Profile of the Store Format:

Grains, pulses, other food items, personal care products are sold in this store

More than two pack sizes available for eg. 500gm, 1kg, 2kg, 5kg packs of Cooking Oil

Greater than 6 brands/unbranded variations available in a product category eg. Lux, Lifebouy, Pears, Rexona, Medimix, Santoor, Dove, Doy in toilet soaps

Some discount offered on most items

Need to travel more than 15 min to reach the store

Home delivery provided

Ambience in the store looks like this -

<u>*CARD 10: Profile of the Store Format:*</u>

Grains, pulses, other food items, personal care products, vegetables, home appliances available under one roof in this store

Only one pack size available for eg, 500gm in Cooking Oil

Under three brands/unbranded variations available in a particular product category for example Lux, Lifebouy and Pears in Toilets soaps

Prices at the retail market price i.e. no discount offered

Need to travel more than 15 min to reach the store

Self Service and billed at a counter

Ambience in the store looks like this -

CARD 11: Profile of the Store Format:

Grains and pulses are sold in this store

2 pack sizes available for eg. 500gm and 1kg in Cooking Oil

Under three brands/unbranded variations available in a particular product category for example Lux, Lifebouy and Pears in Toilets soaps

Some discount offered on most items

Need to travel 10 -15 min to reach the store

Home delivery provided

Ambience in the store looks like this -

<u>*CARD 12: Profile of the Store Format:*</u>

Grains, pulses, other food items, personal care products are sold in this store

More than two pack sizes available for eg. 500gm, 1kg, 2kg, 5kg packs of Cooking Oil

Under three brands/unbranded variations available in a particular product category for example Lux, Lifebouy and Pears in Toilets soaps

Guarantee of the lowest price charged on all items

Walking distance

Over the counter service offered

Ambience in the store looks like this -

CARD 13: Profile of the Store Format:

Grains and pulses are sold in this store

Only one pack size available for eg, 500gm in Cooking Oil

4-5 brands/unbranded variations available in a particular product category for eg. Lux, Lifebouy, Pears, Rexona & Medimix in toilet soaps

Guarantee of the lowest price charged on all items

Walking distance

Home delivery provided

Ambience in the store looks like this -

CARD 14: Profile of the Store Format:

Grains, pulses, other food items, personal care products are sold in this store

2 pack sizes available for eg. 500gm and 1kg in Cooking Oil

4-5 brands/unbranded variations available in a particular product category for eg. Lux, Lifebouy, Pears, Rexona & Medimix in toilet soaps

Prices at the retail market price i.e. no discount offered

Need to travel more than 15 min to reach the store

Over the counter service offered

Ambience in the store looks like this -

CARD 15: Profile of the Store Format:

Grains, pulses, other food items, personal care products, vegetables, home appliances available under one roof in this store

More than two pack sizes available for eg. 500gm, 1kg, 2kg, 5kg packs of Cooking Oil

4-5 brands/unbranded variations available in a particular product category for eg. Lux, Lifebouy, Pears, Rexona & Medimix in toilet soaps

Some discount offered on most items

Need to travel 10 -15 min to reach the store

Self Service and billed at a counter

Ambience in the store looks like this -

CARD 16: Profile of the Store Format:

Grains, pulses, other food items, personal care products are sold in this store

Only one pack size available for eg, 500gm in Cooking Oil

Greater than 6 brands/unbranded variations available in a product category eg. Lux, Lifebouy, Pears, Rexona, Medimix, Santoor, Dove, Doy in toilet soaps

Some discount offered on most items

Walking distance

Self Service and billed at a counter

Ambience in the store looks like this -

CARD 17: Profile of the Store Format:

Grains, pulses, other food items, personal care products, vegetables, home appliances available under one roof in this store

2 pack sizes available for eg. 500gm and 1kg in Cooking Oil

Greater than 6 brands/unbranded variations available in a product category eg. Lux, Lifebouy, Pears, Rexona, Medimix, Santoor, Dove, Doy in toilet soaps

Guarantee of the lowest price charged on all items

Need to travel more than 15 min to reach the store

Home delivery provided

Ambience in the store looks like this -

CARD 18: Profile of the Store Format:

Grains and pulses are sold in this store

More than two pack sizes available for eg. 500gm, 1kg, 2kg, 5kg packs of Cooking Oil

Greater than 6 brands/unbranded variations available in a product category eg. Lux, Lifebouy, Pears, Rexona, Medimix, Santoor, Dove, Doy in toilet soaps

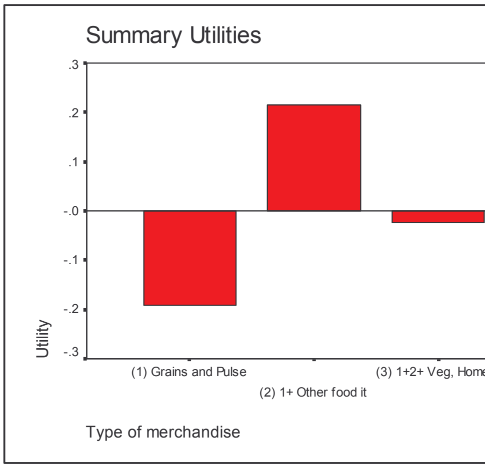
Prices at the retail market price i.e. no discount offered

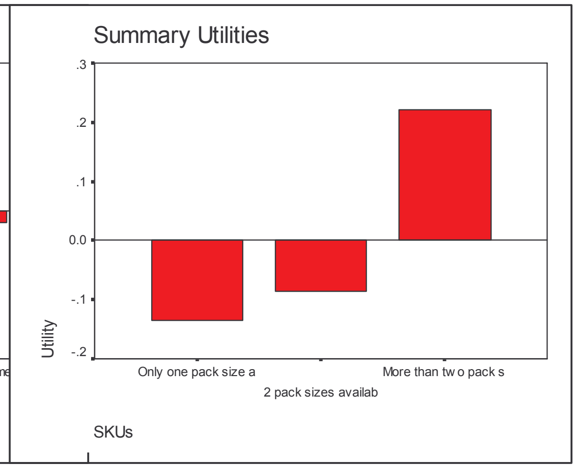
Need to travel 10 -15 min to reach the store

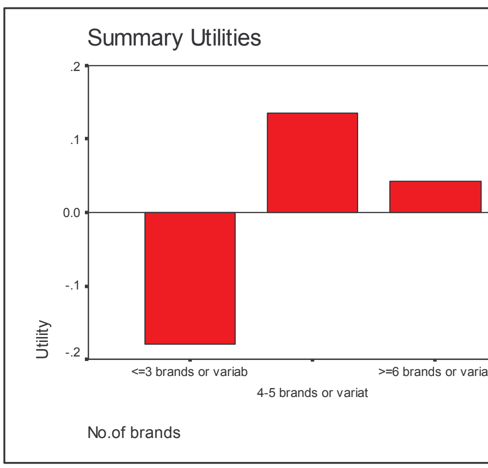
Over the counter service offered

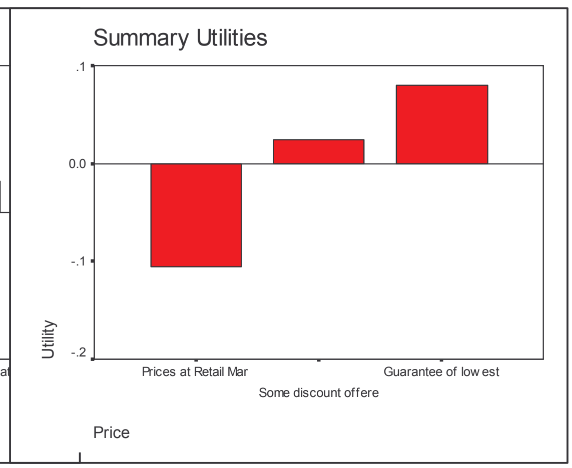
Ambience in the store looks like this -

Appendix – 4: Utilities of the Levels of Attributes

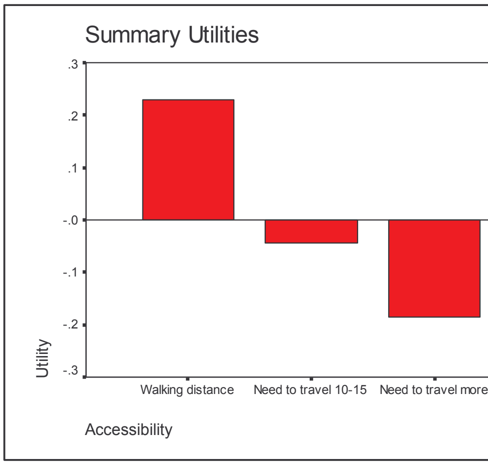


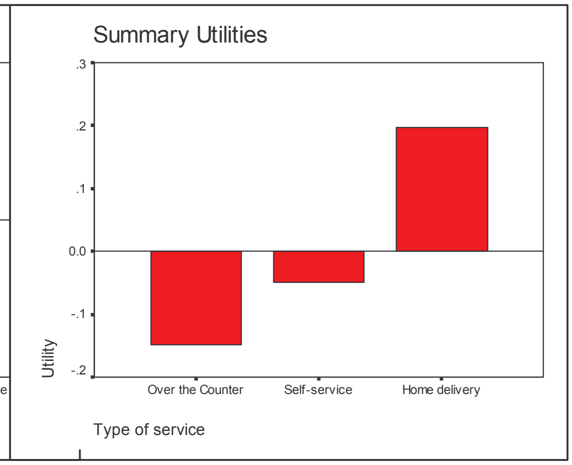


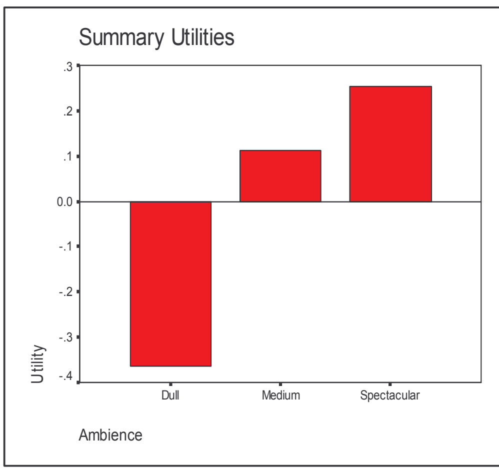


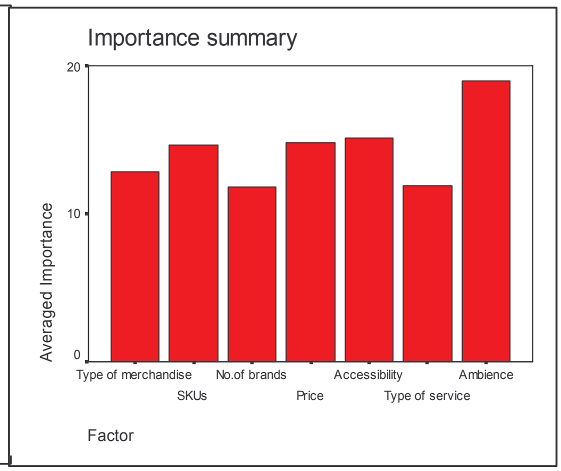


Appendix – 4 (Contd.): Utilities of the Levels of Attributes









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